

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-7. (canceled)

8. (Currently amended) A method for reducing the crest factor of a data symbol to be transmitted in a multi-carrier data transmission system, the data symbol being a function of a plurality of signals provided within a predetermined data frame, each of the plurality of signals allocated to a carrier, each carrier occupying at least one frequency from a transmit data spectrum, at least one carrier being reserved which is not provided for the data transmission, the method comprising: receiving the predetermined data frame, the predetermined data frame exhibiting the data symbol and a cyclic prefix which is derived from a part of the data symbol; and performing crest factor reduction corresponding to the predetermined data frame based at least in part on peak values within the cyclic prefix of the predetermined data frame,

comprising the following steps:

- (a) filtering the data symbol and the cyclic prefix;
- (b) determining whether a time-domain function of the data symbol and of the cyclic prefix within the predetermined data frame exhibits at least one peak value that exceeds a first threshold;
- (c) determining an amplitude of an exhibited peak value and an associated position within the predetermined data frame;
- (d) generating a correction function by scaling and transposing a sample correction function in dependence on the amplitude and associated position of the exhibited peak value; using the at least one carrier which is not available for data transmission for generating the sample correction function in the time domain; and

(e) modifying the data symbol to be transmitted by superimposing the correction function.

9. -10. (Cancelled)

11. (Currently amended) The method as claimed in claim 40-8, further comprising repeating steps (b)-(e) until at least one of the following conditions has occurred: the data symbol no longer exhibits any peak values above the first threshold or and/or a predetermined number of iteration steps has been reached.

12. (Currently amended) The method as claimed in claim 40-8, further comprising repeating steps (a)-(e) are repeated until at least one of the following conditions has occurred: the data symbol no longer exhibits any peak values above the first threshold or and/or a predetermined number of iteration steps has been reached; reached; and

wherein the data symbol modified by the correction function being used for the filtering in step (a).

13. (Currently amended) The method as claimed in claim 40-8, further comprising oversampling at least the data symbol prior to step (b).

14. (Currently amended) The method as claimed in claim 40-8, wherein step (d) further comprises using a dirac-like function as the sample correction function.

15. (Cancelled)

16. (Currently amended) A method for reducing the crest factor of a data symbol to be transmitted in a multi-carrier data transmission system, the data symbol being a function of a plurality of signals provided within a predetermined data frame, each of the plurality of signals allocated to a carrier, each carrier occupying at least one frequency from a transmit data

spectrum, the method comprising: (a) receiving the predetermined data frame, the predetermined data frame having the data symbol and a prefix which is derived from a part of the data symbol; and (b) performing crest factor reduction corresponding to the predetermined data frame based at least in part on peak values within the cyclic prefix of the predetermined data frame by determining an amplitude of an identified peak value and an associated position within the predetermined data frame; generating a correction function by scaling and transposing a sample correction function in dependence on the amplitude and associated position of the identified peak value and using at least one carrier which is not available for data transmission for generating the sample correction function in the time domain.

17. (Previously presented) The method as claimed in claim 16, wherein the step (b) further comprises searching for peak values exceeding a first threshold in the data symbol and in the cyclic prefix.

18. (Previously presented) The method as claimed in claim 17, wherein in step (b) further comprises filtering the data symbol and the cyclic prefix over the predetermined data frame prior to searching for peak values.

19. (Previously presented) The method as claimed in claim 18, wherein filtering the data symbol and cyclic prefix further comprises using filtering characteristics corresponding to a downstream filter of the multi-carrier data transmission system.

20. (Cancelled)

21. (Previously presented) The method as claimed in claim 20, wherein step (b) further comprises modifying the data symbol to be transmitted by superimposing the correction function.

22. (Previously presented) The method as claimed in claim 17, wherein step (b) further

comprises oversampling at least the data symbol prior to searching for peak values.

23. (Previously presented) The method as claimed in claim 20, wherein step (d) further comprises using a dirac-like function as the sample correction function.

24.-27. (Cancelled)